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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/214,865	01/14/1999	YOSHIHIKO TAKISHITA	Q52837	8105

7590

09/30/2002

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EXAMINER

KIM, PAUL L

ART UNIT

PAPER NUMBER

2857

DATE MAILED: 09/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/214,865

Applicant(s)

TAKISHITA, YOSHIHIKO

Examiner

Paul L Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16-19 is/are allowed.
- 6) ☒ Claim(s) 1-3, 8, 11, 13-15 and 20-45 is/are rejected.
- 7) ☒ Claim(s) 4-7, 9 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 2/2/02 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1-3, 14, 15, 20, 21, and 24-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Wood et al.

With regard to claims 1 and 15, Wood et al teaches an ultrasonic inspection system comprising of multiple ultrasonic system (figs. 15-17) each containing a probe (fig. 1, part 12 & fig. 15), system body (fig. 1, part 10), host computer (fig. 1, part 100 & fig. 15, part 242, 234), a transmission line (fig. 1, part 42), and data storage section (col. 13, lines 35-40).

With regard to claim 2, Wood et al teaches the data being a specimen data (col. 3, lines 1-3) and the host computer having determination means (fig. 1, part 102).

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With regard to claim 3, Wood et al teaches at least one of the inspection systems comprising a determination means (fig. 2, part 28).

With regard to claim 14, Wood et al teaches a probe data reception means for receiving data from a specific inspection system (fig. 1, part 132).

With regard to claim 21, Wood et al teaches the system transmitter having an ultrasonic probe data management function for transmitting and receiving ultrasonic signals (fig. 2, part 18) characterized by an external storage medium (fig. 2, part 24).

With regard to claim 24, Wood et al teaches an ultrasonic inspection system comprising a storage section (fig. 2, part 24).

With regard to claims 20 and 25, Wood et al teaches an ultrasonic inspection system comprising a display (fig. 1, part 26).

With regard to claim 26, Wood et al teaches an inspection management system with means to transmit and receive signals (fig. 2, part 18), inspect a specimen based on these signals (fig. 2, part 28), and store these signals in *its own* storage device (fig. 1, part 24).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. Claims 8, 10, 11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wood et al in view of Falsetti et al.

With regard to claims 8, 10, 11, and 13, Wood et al does not teach the host computer of the ultrasonic inspection system comprising a reception level comparison means. Falsetti et al teaches an ultrasonic inspection system that comprises a reception level means for comparing an average of continuous reception level data with a predetermined reception level setup value (col. 3, lines 46-62). It would have been obvious to one of ordinary skill in the art at the time of the invention, to modify Wood et al, so that the inspection system comprises a reception level comparison means, as taught by Falsetti et al, in order to determine the data trends of the DUT over a period of time.

11. Claims 22, 23, 27, and 28-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wood et al in view of Shinomura et al.

With regard to claims 22 and 27, Wood et al does not teach probe data being stored at manufacture time and data being updated each time the probe is inspected. Shinomura et al teaches an ultrasonic probe inspection means in which factory data is stored (col. 11, lines 59-67). It would have been obvious to one of ordinary skill in the art at the time of the invention, to modify Wood et al, so that the probe characteristic data can be stored during factory time and updated periodically, as taught by Shinomura et al, in order to determine probe wear condition over a period of time.

With regard to claims 23 and 28, Wood et al does not teach executing inspection for receiving predetermined characteristic of the ultrasonic probe and storing the data in

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an external storage medium. Shinomura et al teaches predetermined ultrasonic probe data being stored in a storage unit (col. 11, lines 59-65). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Wood et al, so that predetermined probe data can be stored in a storage unit in order to be able to determine wear characteristics of the ultrasonic probe over a period of time.

With regard to claims 29-32, Wood et al does not teach the ultrasonic system retrieving probe characteristics data and storing the data. Shinomura et al teaches an ultrasonic inspection system having an ultrasonic probe data management function for transmitting and receiving ultrasonic signals (col. 3, lines 19-20), with the system comprising a computer connected to one or more inspection systems (fig. 2), probe data collection means (fig. 2, part 114b), and a storage section (fig. 2, part 114a). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Wood et al, so that probe data can be collected and stored in order to be able to determine wear characteristics of the ultrasonic probe over a period of time.

With regard to claims 34, 39, 40, Wood et al teaches an ultrasonic inspection system comprising a storage section (fig. 2, part 24).

With regard to claims 33, 35, 36, 37, 38, and 41-45 Wood et al teaches a display unit to output visual inspection information (fig. 1, part 26).

Response to Arguments

6. Applicant's arguments filed February 2, 2002 have been fully considered but they are not persuasive.

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With regard to claim 1, the applicant argues that Wood et al does not teach the diagnosis system having multiple ultrasonic systems. However, figures 15-17 and column 14, lines 15+, clearly shows a network of ultrasonic systems connected to a host system.

With regard to claim 21, applicant argues that the ultrasonic system in Wood et al's invention is not provided with an external storage medium. However, Wood's does teach an external storage medium that is outside of the ultrasonic probes and part of the management system (fig. 15, parts 242, 234 and col. 13, lines 35-40).

Allowable Subject Matter

7. Claims 4-7, 9, and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 16-19 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: With regard to claims 4-7 and 16-19, the prior art does not teach performing a test by collecting data with the probe connected to the ultrasonic system, performing another test with the probe disconnected, and then diagnosing the system based on the collected data.

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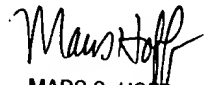
Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Kim whose telephone number is 703-305-7468. The examiner can normally be reached on Monday-Thursday 9:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 703-308-1677. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7722 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

PK
September 19, 2002


MARC S. HOFF
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800